Monitoring Data Record

Project Title: R-0210C (Sites 4 and 5) COE Action ID: 1993-0-0570
Stream Name: Unnamed tributary to the Little Crane Creek DWQ Number: 010404
City, County and other Location Information: Intersection of Service Rd. and Oak Leaf Rd. off of US 1 (Vass Bypass) in Lee County (Sta. 22+00 to Sta. 24+80)
Date Construction Completed: March 2004 Monitoring Year: (1) of 5
Ecoregion: 8 digit HUC unit 03030004
USGS Quad Name and Coordinates:
Rosgen Classification:
Length of Project: 980' Urban or Rural: Rural Watershed Size:
Monitoring DATA collected by: M. Green, D. Jenkins Date: 6/7/05
Applicant Information:
Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Rd. Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us
Consultant Information:
Name:
Address:
Telephone Number: Email address:

Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level (1) ~~2~~ ~~3~~
Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit Conditions: : The permittee shall monitor the stream relocation site for a period of five years starting the year following construction. Monitoring data at the site should include the following: reference photos, plant survival, and channel stability. Data shall be collected each year for 5 years at the same time of year. No less than two bankfull events must be documented through the required 5-year monitoring period. If less than two bankfull events occur during the first 5 years, monitoring will continue until the second bankfull event is documented. The bankfull events must occur during separate monitoring years.

Section 1. PHOTO REFERENCE SITES
(Monitoring at all levels must complete this section)

Attach site map showing the location and angle of all reference photos with a site designation (name, number, letter, etc.) assigned to each reference photo location. Photos should be provided for all structures and cross section locations, should show both banks and include an upstream and downstream view. Photos taken to document physical stability should be taken in winter. Photos taken to document vegetation should be taken in summer (at representative locations). Attach photos and a description of each reference photo or location. We recommend the use of a photo identification board in each photo to identify location.

Total number of reference photo locations at this site: 7 reference points, 2 photos at each

Dates reference photos have been taken at this site: 6/7/05

Individual from whom additional photos can be obtained (name, address, phone):
Other Information relative to site photo reference:
If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL
Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):
Woody vegetation was minimal along the stream bank and in the floodplain.

Estimated causes, and proposed/required remedial action:
This site will be supplementally planted in 2006.

ADDITIONAL COMMENTS: Vegetation noted onsite consisted of black willow, sweetgum, overcup oak, tulip poplar, sedges, cattails, *juncus* sp., and various grasses.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

The stream is stabilized for the 1st year of monitoring. The log vane structure noted in photo 1 is set to high which is causing water to go under the log vane. This log vane will be reset to correct the elevation of the structure. The sediment control stone noted throughout the site will be removed before supplemental planting takes place.

Date Inspected	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type	24 +80 @ log vane				
Is water piping through or around structure?	Water is piping under the log vane				
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					

NOTE: Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.

UT Little Crane Creek

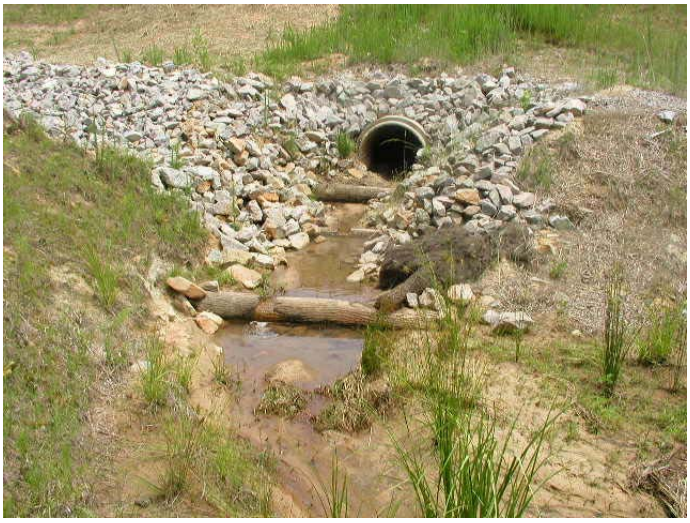

Photo 1

Photo 2

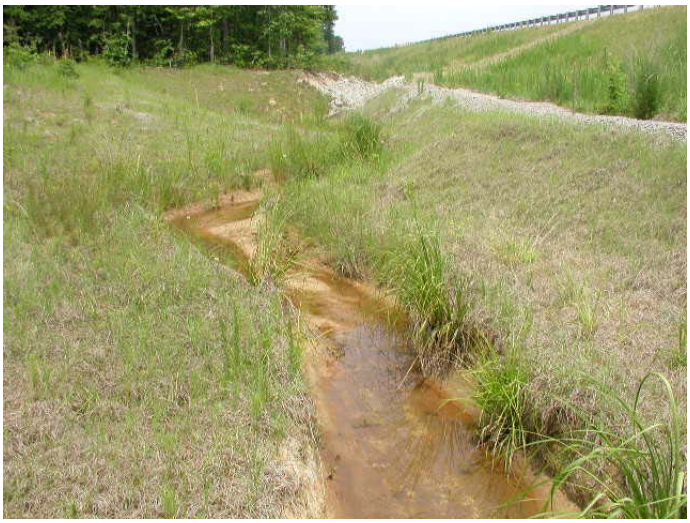

Photo 3

Photo 4

Photo 5

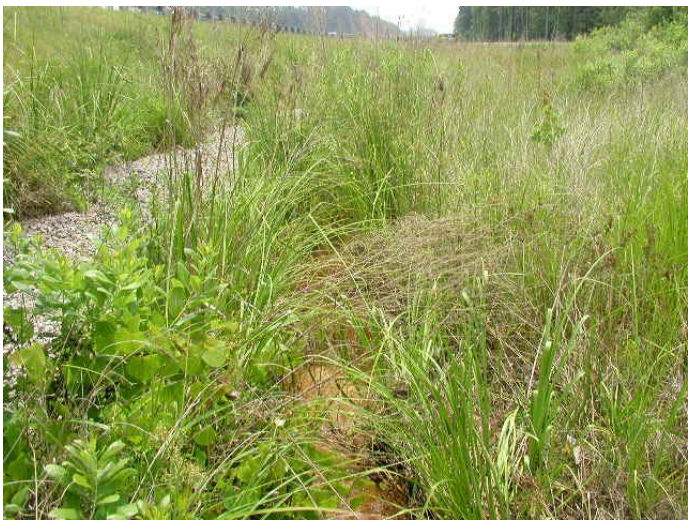

Photo 6

Year 1 – June 2005

UT Little Crane Creek

Photo 7

Photo 8

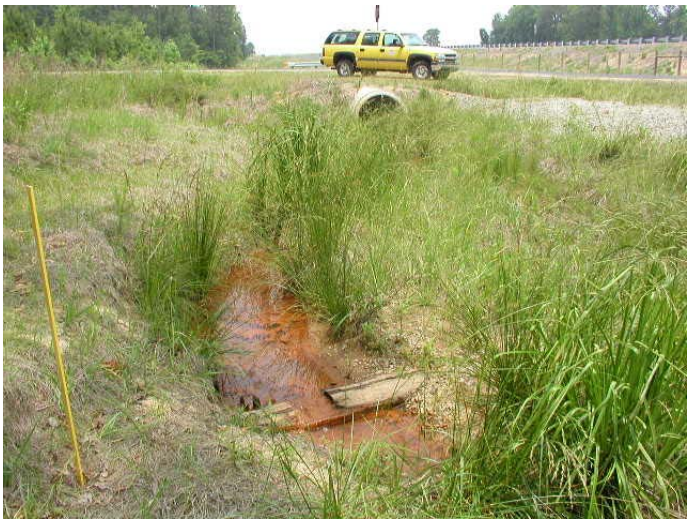

Photo 9

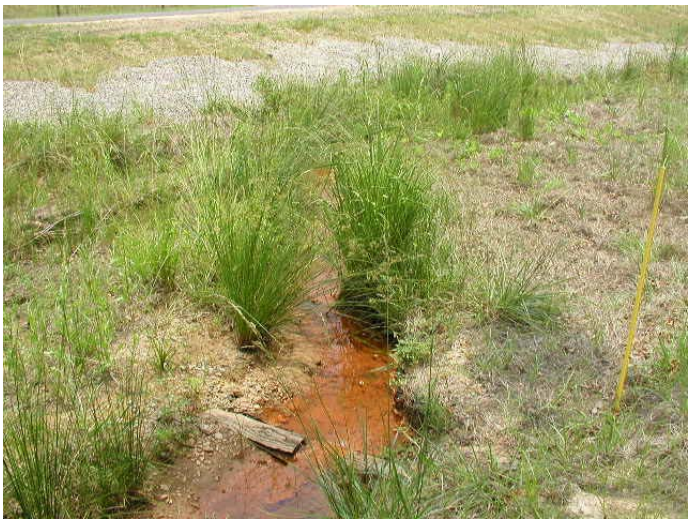

Photo 10

Photo 11

Photo 12

Year 1 – June 2005

UT Little Crane Creek

Photo 13

Photo 14